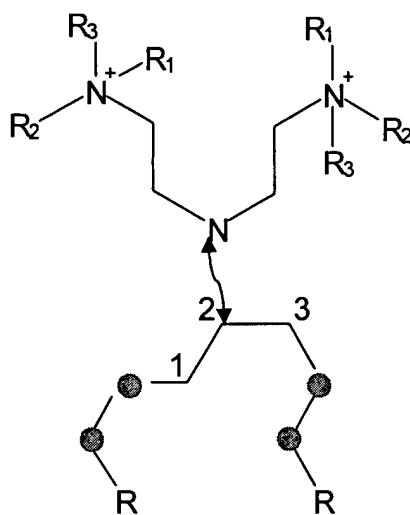


Claims

1. Aqueous lipid dispersions made by double-chained cationic lipids that have a bifunctional polar head and the two hydrophobic chains composed of linear alkyl (saturated) hydrocarbons are at position 1 and 3 as shown below, for nucleic acid, peptide and other synthetic molecule drug delivery.

2. The delivery system of claim 1, and any other ingredient that is added to the system of claim 1 for activity or other technical reasons.



Structure S of cationic lipids.

$R = C_{11}H_{23}, C_{13}H_{27}, C_{15}H_{31}, C_{17}H_{35}$ (linear chains)

$R_1 = H, CH_3, -C(NH_2)=NH$

$R_2 = H, CH_3$

$R_3 = H, CH_3$

connector $\begin{array}{c} \updownarrow \end{array}$: $-CH_2-$, $-CO-$, $-OCO-$, CH_2CH_2 , $-CH_2CO-$, CH_2OCO- , $-CH_2CH_2CO-$,
 $-CH_2CH_2OCO-$

● : $-CH_2-$, $-CO-$, $-NH-$, $-S-$, $-O-$